

Amendments to the Specification:

Please replace the title on page 1, with the following redlined title:

MEASURING TRANSFORMER UTILIZING A REFERENCE CURRENT

Please replace the paragraph on page 6, line 6, with the following redlined paragraph:

An embodiment of a measuring transformer 200 according to the invention is diagrammatically shown in Figure 2. It again has a toroidal core 10 comprising a ferromagnetic material with an air gap 11 in which a magnetic flux measuring element 12, for example once again a Hall element, is arranged. Connected on the output side of the Hall element 12 is an amplifier 14 for amplifying the electrical output signal of the Hall element 12. As in the known measuring transformer a conductor 16 extends through the annular core 10, through which the current to be measured flows.

Please replace the paragraph on page 7, line 3, with the following redlined paragraph:

According to the invention as shown in Figure 2 a predetermined reference current is supplied at terminal 22 to the secondary winding 18 by the reference presetting unit 246. The unit 26 can be a basic controlled current source which provides such a predetermined current. Many known circuits for this current source can be used and a person skilled in the art will know which kind of device from the many known to use for providing a predetermined reference current. If now the current flowing in the conductor 16 equals this predetermined reference current, the resulting magnetic flux in the core 10 is equal to zero and the signal of the whole element 12 is equal to zero so that there is no signal at the output 24. If, however, the current in the conductor 16 is different from the reference current, there is a resulting magnetic flux in the core 10, resulting in a signal of the whole element 12, which is after amplification provided at the output 24. This output signal reflects the deviation of the current in the conductor 16 from the reference current flowing through the winding 18. The terminal 24 is the output terminal providing the mentioned output signal.

Please replace the paragraph on page 7, line 17, with the following redlined paragraph:

There are many different uses of such a measuring transformer. For instance, it can be used to measure the output current of an inverter (not shown), i.e. the current flowing through the conductor 16. In one embodiment, the inverter is a component of a wind power installation. The wind power installation drives the inverter, and the output current of the inverter flows through the conductor 16. ¶The output signal at output 24 then immediately shows if there are fluctuations in the current in the conductor 16. By use of the control unit 28 to which said output signal is provided the current flowing through the conductor 16 can be controlled to approximate the actual value to the reference value as quickly as possible. Again, it will be known to the skilled person how to implement the control unit 28 to achieve the stated control since it is well within the ordinary skill of the art. For instance, a microcontroller or a microcomputer could be used with basic commands as described herein. In other embodiments in which the inverter is used for wind power installations, the inverter may also include as a component the control unit 28, the reference presetting unit 26, or both the control unit 28 and the reference presetting unit 26.

Please replace the paragraph on page 8, line 22, with the following redlined paragraph:

A measurement for the absolute value of the current flowing in the conductor is obtained with the measuring transformer according to the invention if the reference signal is superimposed with the output signal of the amplifier 14. That superimposed signal however is not fed into the secondary winding 18. That superimposition will preferably be effected by summing in a stage connected downstream of the amplifier 14. In one embodiment of the invention, as illustrated in Figure 2, a summing unit 30 is electrically coupled to the reference presetting unit 26 and the signal output 24. The summing unit 30 receives the predetermined reference current from reference presetting unit 26 and receives the output signal from signal output 24. The summing unit 30 superimposes the predetermined reference current with the output signal to generate an absolute value of the current flowing in the conductor 16 at a summing unit output 32.

Please replace the paragraph on page 9, line 7, with the following redlined paragraph:

In a further use the absolute value of the current flowing in the conductor 16 can be obtained if the reference current is superimposed with the output signal at output 24, for instance by use of thea summing unit 30~~(not shown)~~.